Municipal Facilities Operation & Management: 2.1.13 Vehicle Maintenance/ Equipment Yards & Material Storage Facilities

2.1.13.1 Introduction

The City of San Diego operates and maintains a number of vehicle maintenance facilities, equipment yards and material storage facilities. The primary yard facilities currently include: 20th & B, Environmental Services Department, Chollas, Rose Canyon, and Fire and Police (9 Facilities). Note: Two additional yards are going to be constructed over the next few years. This program component is applicable to all departments that own or operate such facilities. The purpose of this section is to identify the activities conducted at these facilities and provide Storm Water Best Management Practices (BMPs) that will reduce or eliminate adverse water quality impacts from such activities.

The City's program must meet the requirements of the San Diego County municipal storm water permit (Permit), as summarized in Table 2.1.13-1.

Table 2.1.13-1. Permit Requirements – Vehicle Maintenance/ Material Storage Facilities.

Section	Requirement (Summary)	Permit Section
2.1.13.2	Implement pollution prevention methods	F.3.a.(1)
2.1.13.2	Designate and implement minimum BMPs to protect water quality	F.3.a.(4)
2.1.13.2	Inspect areas and activities annually	F.3.a.(7)
2.1.13.2	Elimination of illicit discharges and connections	F.5.d.
2.1.13.2	Facilitate the proper management and disposal of used oil and hazardous wastes	F.5.h.
2.1.13.2	Implement and designate an Educational Program for all	F.4.a.
2.1.13.2	pertinent target communities	F.4.b.
2.1.13.4	Document activities for Jurisdictional Urban Runoff Management Program Annual Report	I

This program component's objectives are to:

- Develop policies and procedures to prevent pollutants resulting from activities associated with vehicle maintenance, yards and material storage from entering into the storm drain system or receiving waters.
- Develop a system to document and report storm water pollution prevention activities.
- Develop and follow a Storm Water Pollution Prevention Plan for each major facility.
- Educate staff on ways to prevent storm water pollution.

2.1.13.2 Activities

In order to effectively implement the vehicle maintenance, equipment yards and material storage activities outlined below, all departments involved with such activities shall maintain a designated coordinator or coordinators to maintain a working understanding of the Municipal Permit so that he/she can provide guidance to department management and staff in implementing the Component of the Urban Runoff Management Plan. The name(s) of the coordinator shall be submitted to the Storm Water Program by Thursday, February 21, 2002— the Urban Runoff Management Program implementation date. The names of new representatives shall be provided whenever the designated coordinator is replaced. The Storm Water Program will interact with the coordinator(s) to provide the latest Municipal Permit information and to request annual compliance reports.

The following is a list of activities that have been identified as potential sources of pollutants for vehicle maintenance/equipment yards and materials storage. Recommended BMPs are listed for each activity.

Vehicle and Equipment Fuel Dispensing Areas

- Determine whether any fuel dispensing equipment is exposed to storm water and/or whether fueling or the transfer of any chemical from one vessel to another is conducted near a storm drain. If so:
 - a. Ensure a method is in effect to protect all adjacent storm drains in the event of a spill.

Vehicle and Equipment Washing

- 1) Verify floor mat and equipment screen/filter cleaning is not conducted in a location that may adversely impact a storm drain
- 2) All vehicle and equipment rinse water should be discharged, with proper approval, into a sanitary sewer drain. All waste water resulting from power washing of contaminated surfaces may be subject to some type of pretreatment prior to entering the sanitary sewer.
- Recycle wash water in a closed loop system for automated vehicle washers where feasible.

Vehicle Equipment Maintenance

- 1) If vehicles are maintained on site, ensure there are no associated impacts to any storm drains.
- 2) If leaks or drips occur under vehicles, drip pans should be placed under the vehicles until the vehicle can be repaired.

- 3) If applicable, inspect outdoor drains and suspicious indoor drains in vehicle maintenance areas.
- 4) If specialized equipment is maintained on site, ensure wash water used to clean equipment is not disposed to the storm drain directly or indirectly.
- 5) Ensure air compressor units are located in covered areas, routinely inspected and repaired as necessary and that bleed line releases are not discharged into the storm drain system or receiving waters.
- 6) Ensure a method is in effect to protect all adjacent storm drains in the event of a spill.

Material Storage

- 1) Determine whether raw materials and their by-products are exposed to rain water. Ensure loose materials are stored under cover or in bermed areas.
- 2) If raw materials and their by-products are transferred from one place to another adjacent to any storm drain, or in such a manner to impact the storm drain, recommend placing protective covers or similar devices over storm drains and improving housekeeping in these areas.
- 3) Ensure that all materials are properly stored in sealed containers and that stock piled materials are covered to prevent wind erosion. Any leaking containers should be disposed of properly.

Waste Storage

(Note: In cases where hazardous materials or hazardous waste storage pose a threat to the storm drain, the facility should consult with the appropriate local hazardous materials/waste enforcement agency: County Department of Environmental Health, County Air Pollution Control District, or County Department of Agriculture, Weights & Measures.)

- 1) Determine whether the facility stores or dispose of hazardous materials, hazardous wastes, or any other substances on site.
- 2) Verify if rain water can enter any double contained areas and how these areas are drained once rain water comes into contact with these materials. The facility should consult with the local hazardous materials enforcement agency and Metropolitan Wastewater Department as necessary.
- 3) Determine whether the transfer of hazardous materials, waste or nonhazardous substances may potentially impact the storm drain. If nonhazardous substances are involved:
 - a. Recommend good housekeeping measures.
 - b. Recommend the facility protect storm drains by relocating substance to a covered area.
 - c. Recommend the facility berm or cover substance(s) or install an approved protective device at storm drain inlets.
- 4) If there are any storm drains adjacent to any storage areas, request that the facility effect a method to monitor and protect storm drain inlet from accidental discharges.

Good Housekeeping

- 1) The coordinators will be responsible for developing and implementing a Storm Water Pollution Prevention Plan for each major yard facility.
- 2) The coordinator(s) will be responsible for quarterly inspections of the vehicle maintenance areas, equipment yards and material storage areas.
- A written report reviewed by a supervisor shall be maintained onsite for each inspection conducted.
- 4) Use dry methods for clean ups.
- 5) Educate any vendors or contractors that may conduct similar activities of the policies and procedures recognized and enforced by the City of San Diego.
- 6) Ensure yard areas are free from debris and litter.
- 7) Conduct annual yard clean up prior to the rainy season (October 1st).

Routine Inspection and Cleaning, Review of Activities

The following self-inspections processes will be performed at Operations Centers:

- Facilities will be inspected annually and cleaned as needed.
- Maintenance activities will be reviewed annually to verify that appropriate storm water BMPs and practices are being utilized.
- Report modifications and corrective actions identified during selfinspection to the Storm Water Program annually as part of the Program Assessment.

Twenty-Four Hour Non-Storm Water Discharge Reporting

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the Regional Board. A report will also be forwarded to the Strom Water Program for record keeping purposes. Non-storm water discharges that pose a significant threat to water quality or human health, will be evaluated by City staff against the "24-Hour Non-Storm Water Discharge Reporting Checklist". A significant threat to water quality or human health is determined on a case-by-case basis and will be dependent on the type of pollutant, the degree of the violation (i.e. the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Examples of discharges that will be reported include sewage spills and non-storm water discharges, such as a significant sediment load into Los Penasquitos Lagoon.

Where staff determines that discharges pose a significant threat to water quality or human health, the Storm Water Program or responsible City department will notify the Regional Board orally and by facsimile within 24 hours of the discharge event. Additionally, a written report of the event and follow up actions will be sent to the designated Regional Board contact for the Municipal Storm Water Permit, if needed, within 5 working days of the day the event was identified. A standard reporting form will be created by the Storm Water Program to be used by all City departments to facilitate consistency and maintain clear communication with the Regional Board. The report will contain the following information:

- Description of the event and it's cause;
- Duration of the event;
- Time the event is expected to continue if it has not been corrected;
- Steps taken to correct the non-storm water discharge event.

Education & Training

1. Internal/Municipal Education: (Completed by the Storm Water Program)

The City of San Diego plans to conduct two levels of education and training for staff: General and Activity Specific. All staff will receive a basic introduction to the issue via a "General Storm Water" workshop created and provided to the Departments by the General Services Storm Water Pollution Prevention Program. Additionally, those departments or work groups that perform work activities specifically identified in, and affected by, the Permit will create and execute and fund Activity Specific training sessions to introduce new work processes, functions and behaviors that incorporate the Best Management Practices (BMPs) necessary for staff to prevent illegal discharges into the City's storm water collection and conveyance system and recreational waters. Additionally, the Departments will fund the External Education and Outreach elements in this plan. All education and outreach covered by the permit shall contain the phrase, "Another City of San Diego Think Blue Program protecting our beaches, bays and watersheds."

A) General Storm Water Training Funded By the Storm Water Program:

The General Storm Water workshops, while created and funded by the Storm Water Program, are primarily being given by trainers to the staff of their respective departments. And, Items 2,3,4,5 and 6, below, are the educational materials created for the workshops. A "Train the Trainer" workshop was also created and given by the Storm Water Program (Item 7) to familiarize the trainers on the material and subject matter prior to rolling out the General Training workshop to their department staff.

Table 2.1.13-2. Storm Water Program General Training.

	Table 2.1.13-2. Glorin Water 1 Togram General Training.		
ITEM		AVAILABLE	
1.	Clean Water Leader/3-Cs BMP Reference Card	July 2001	
2.	General Storm Water Training Video	October 2001 To be completed by June 2002	
3.	City Employee Brochure	October 2001	
4.	Stop Pollution Pad	October 2001	
5.	Employee Knowledge & Behavior Survey. To be given before and after each General Storm Water Workshop by department trainers	October 2001	
6.	Frequently Asked Questions for department Trainers	October 2001	
7.	Train the Trainer Sessions. Training of department trainers on content and materials for the General Storm Water Workshops	September 10-14, 2001	
8.	Storm Water Newsletter	July/August 2002*	

^{*} Note that Items 1 through 7 occurred in FY 2002 and reflect actual costs for city-wide distribution, and that Item 8 is slated for Fiscal Year 2003 and reflects an estimated cost and available date.

B) Activity Specific Storm Water Best Management Practices Training(s):

The responsible departments will work closely with the Storm Water Program to create a complete training module for staff and to establish a system to update and improve the information and training materials available to staff.

Table 2.1.13-3. Department Training Activities.

	Table 211116 of Department Training Activities		
ITEM		AVAILABLE*	
1.	Identify needs, create and execute Activity Specific trainings/workshops.	Completed by October 2002	
2.	Create Storm Water Pollution Prevention Plan for the primary yard facitlities.	Completed by February 2003	
3.	Send information memos to all City staff and contractors as appropriate regarding City's expectation of compliance with applicable storm water laws.	September 2002	
4.	Send storm water BMP brochures and related work-area posters to all City staff and contractors as appropriate regarding City's expectation of compliance with applicable storm water laws.	January 2003	

ITEM		AVAILABLE*
5.	All brochures shall contain the phrase, "Another City of San Diego Think Blue program protecting our beaches, bays and watersheds".	September 2002
6.	Update SWPPP as needed –periodic	As Needed
7.	Storm Water BMP Bulletin Boards in Employee Area(s)	June 2003
8.	Train new employees on Storm Water activities. General and Activity Specific to be conducted by supervisor	New Employee Orientation

^{*} Note the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.

2.1.13.3 **Phasing**

Year 1 (July 1, 2001 – June 30, 2002):

- Prepare/Implement education program (see above. List sub-tasks from the education section. This will likely be phased over the 5 years and you'll have items to list for each year.)
- Prepare SWPPP
- Implement existing activities that are considered "storm water practices"

Year 2 (July 1, 2002 - June 30, 2003):

- Implement Year 2 storm water practices
- Prepare projected storm water budget
- Education activities
- Prepare & submit annual activities report
- · Finalize, Assess, Revise SWPPP, budget

Year 3 (July 1, 2003 – June 30, 2004):

- Implement Year 3 storm water practices identified in SWPPP
- Education activities
- Prepare & submit annual activities report
- Assess SWPPP, revise budget

Year 4 (July 1, 2004 – June 30, 2005):

- Implement Year 4 storm water practices identified in SWPPP
- Education activities
- Prepare & submit annual activities report
- Assess SWPPP, revise budget

Year 5 (July 1, 2005 - June 30, 2006):

- Implement Year 4 storm water practices identified in SWPPP
- Education activities
- Prepare & submit annual activities report
- · Assess SWPPP, revise budget

Actual implementation of the activities listed above is dependent upon identification of funding in future yearly budgets and City Council approval.

2.1.13.4 Annual Assessment

The following form is representative of the quantitative and qualitative measures that will be tracked by the Storm Water Program regarding the Vehicle Maintenance/ Equipment Yards & Material Storage Facilities component in order to prepare the Jurisdictional Urban Runoff Management Program annual assessment. These assessment factors and questions are presented for information only; some questions may be modified prior to each annual assessment period, and not all of the factors or questions below may apply to each component's responsible department(s). Prior to each fiscal year, a tailored Annual Assessment Form will be distributed to responsible departments, and will include an Excel spreadsheet containing direct and indirect quantitative and qualitative measures similar to the example below. The Storm Water Program will provide a blank copy of the Annual Assessment Form and additional guidance to department management prior to the beginning of each fiscal year. Submission of this report will require department director approval.

Program Assessment Form - Municipal Facilities Operations and Management - Vehicle Maintenance/ Equipment Yards & Material Storage Facilities

QUANTITATIVE ASSESSMENT:

Activity	Quantity	Units	Comments
Number of high priority municipal facilities		#	
Number of high priority municipal facilities targeted for inspection		#	Due to calendar-year vs. fiscal year, staffing, budget, etc., as well as Permit Section F.3.b.(6)(d), the number of sites targeted for inspection may be less than the actual number of sites.
Number of high priority municipal facilities inspected		#	Number of sites (not the number of inspections, which may or may not be the same).
Number of medium and low priority municipal facilities inspected		#	See above.
Quantity of material removed from MS4		tons	direct measure; report in tons.
Quantity of debris removed that could have enter MS4 (i.e. street sweeping, litter removal)		tons	direct measure; report in tons.

QUALITATIVE ASSESSMENT:
Describe the major accomplishments of this component over the past year.
2. Summarize the educational and outreach activities conducted for this component over the past year to educate staff on water quality principles.
3. Summarize new activities or improvements to be implemented next year as a result of your self-assessment.
4. Other comments.
FINANCIAL ASSESSMENT:
Estimated annual storm water expenditures:
Personnel Expenditures:
Non-personnel Expenditures: